IN THE CLAIMS

The following is a complete listing claims with a status identifier in parenthesis.

LISTING OF CLAIMS

1. (Original) A method for frequency hopping in a time division multiple access wireless communication system, comprising:

first measuring, for at least one idle time slot, interference for a first period at a first rate on available communication frequencies in a coverage area;

forming a first list of frequencies from the available communication frequencies based on the first interference measurements;

second measuring, for the idle time slot, interference for a second period at a second rate on the frequencies in the first list;

determining an interference level requirement for a call associated with a time slot;

selecting frequencies from the first list meeting the interference level requirement based on the second interference measurements during the associated time slot; and

performing frequency hopping for the call using the selected frequencies.

2. (Original) The method of claim 1, wherein the second rate is greater than the first rate and the second period is less than the first period.

3.   (Original) The method of claim 1, wherein the forming step selects a number of the available communication frequencies having a lowest interference, the number being a predetermined number.

4.   (Original) The method of claim 1, wherein the selecting step comprises:

measuring a carrier power of the call;

determining a carrier-to-interference (CIR) ratio for each frequency in the first list based on the second interference measurements and the measured carrier power;

selecting each frequency in the first list having a CIR ratio greater than or equal to a desired CIR ratio associated with the call.

5.   (Original) The method of claim 4, wherein the desired CIR ratio is a predetermined minimum CIR ratio for the call.

6.   (Original) The method of claim 4, wherein the measuring a carrier power step measures the carrier power of the call during call set-up or call handoff.

7.   (Original) The method of claim 1, wherein the selecting step comprises:

dividing the frequencies in the first list into a predetermined number of groups based on the second interference measurements;

measuring a carrier power of the call;

determining a carrier-to-interference (CIR) ratio range for each group based on the second interference measurements and the measured carrier power;

selecting each group having a CIR ratio range greater than or equal to a desired CIR ratio associated with the call.

8.   (Original) The method of claim 1, wherein the selecting step comprises:

dividing the frequencies in the first list into a predetermined number of groups based on the second interference measurements;

measuring a carrier power of the call;

determining a carrier-to-interference (CIR) ratio range for each group based on the second interference measurements and the measured carrier power;

selecting one of the groups having a CIR ratio range greater than or equal to a desired CIR ratio associated with the call.

9.   (Original) A method for frequency hopping in a time division multiple access wireless communication system, comprising:

first measuring interference for a first period at a first rate on available communication frequencies in a coverage area;

forming a first list of frequencies from the available communication frequencies based on the first interference measurements;

second measuring, for at least one idle time slot, interference for a second period at a second rate on the frequencies in the first list;

determining an interference level requirement for a call associated with a time slot;

selecting frequencies from the first list meeting the interference level requirement based on the second interference measurements during the associated time slot; and

performing frequency hopping for the call using the selected frequencies.

10. (Original) The method of claim 9, wherein the second measuring step makes said second measurements for each idle time slot.

11. (Original) The method of claim 9, wherein said first measuring step makes said first measurements during a frame including a predetermined number of time slots.

12. (Original) The method of claim 9, wherein the second rate is greater than the first rate and the second period is less than the first period.

13. (Original) The method of claim 9, wherein the forming step selects a number of the available communication frequencies having a lowest interference, the number being a predetermined number.

14. (Original) The method of claim 9, wherein the selecting step comprises:

measuring a carrier power of the call;

determining a carrier-to-interference (CIR) ratio for each frequency in the first list based on the second interference measurements during the associated time slot and the measured carrier power;

selecting each frequency in the first list having a CIR ratio greater than or equal to a desired CIR ratio associated with the call.

15.   (Original) The method of claim 14, wherein the desired CIR ratio is a predetermined minimum CIR ratio for the call.

16.   (Original) The method of claim 14, wherein the measuring a carrier power step measures the carrier power of the call during call set-up or call handoff.

17.   (Original) The method of claim 9, wherein the selecting step comprises:

dividing the frequencies in the first list into a predetermined number of groups based on the second interference measurements;

measuring a carrier power of the call;

determining a carrier-to-interference (CIR) ratio range for each group based on the second interference measurements during the associated time slot and the measured carrier power;

selecting each group having a CIR ratio range greater than or equal to a desired CIR ratio associated with the call.

18.   (Original) The method of claim 9, wherein the selecting step comprises:

dividing the frequencies in the first list into a predetermined number of groups based on the second interference measurements;

measuring a carrier power of the call;

determining a carrier-to-interference (CIR) ratio range for each group based on the second interference measurements and the measured carrier power;

selecting one of the groups having a CIR ratio range greater than or equal to a desired CIR ratio associated with the call.

19.   (Original) A method for frequency hopping in a time division multiple access wireless communication system, comprising:

first measuring interference for a first period at a first rate on available communication frequencies in a coverage area;

forming a first list of frequencies from the available communication frequencies based on the first interference measurements;

second measuring, for each idle time slot, interference for a second period at a second rate on the frequencies in the first list;

forming, for each idle time slot, a second list of the frequencies in the first list that is order according to the second interference measurements for the time slot;

forming a composite second list from the second lists;

determining an interference level requirement for a call associated with a time slot;

selecting frequencies from the composite second list meeting the interference level requirement based on the second interference measurements during the associated time slot; and

performing frequency hopping for the call using the selected frequencies.

20.   (Original) The method of claim 19, wherein the forming a composite second list step selects a predetermined number of frequencies having a lowest second interference measurement from each second list.

21.   (Original) The method of claim 19, wherein said first measuring step makes said first measurements during a frame including a predetermined number of time slots.

22.   (Original) The method of claim 19, wherein the second rate is greater than the first rate and the second period is less than the first period.

23.   (Original) The method of claim 19, wherein the forming step selects a number of the available communication frequencies having a lowest interference, the number being a predetermined number.

24.   (Original) The method of claim 19, wherein the selecting step comprises:

measuring a carrier power of the call;

determining a carrier-to-interference (CIR) ratio for each frequency in the composite second list based on the second interference measurements and the measured carrier power;

selecting each frequency in the composite second list having a CIR ratio greater than or equal to a desired CIR ratio associated with the call.

25.   (Original) The method of claim 24, wherein the desired CIR ratio is a predetermined minimum CIR ratio for the call.

26.   (Original) The method of claim 24, wherein the measuring a carrier power step measures the carrier power of the call during call set-up or call handoff.

27.   (Original) The method of claim 19, wherein the selecting step comprises:

dividing the frequencies in the composite second list into a predetermined number of groups based on the second interference measurements;

measuring a carrier power of the call;

determining a carrier-to-interference (CIR) ratio range for each group based on the second interference measurements and the measured carrier power;

selecting each group having a CIR ratio range greater than or equal to a desired CIR ratio associated with the call.

28.   (Original) The method of claim 1, wherein the selecting step comprises:

dividing the frequencies in the composite second list into a predetermined number of groups based on the second interference measurements;

measuring a carrier power of the call;

determining a carrier-to-interference (CIR) ratio range for each group based on the second interference measurements and the measured carrier power;

selecting one of the groups having a CIR ratio range greater than or equal to a desired CIR ratio associated with the call.